



Aviation Investigation Final Report

Location:	EUREKA, South Dakota	Accident Number:	DEN87LA053
Date & Time:	February 10, 1987, 20:00 Local	Registration:	N3451X
Aircraft:	MOONEY M20C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

AFTER NORMAL TAKEOFF, THE ACFT CONTACTED THE TERRAIN THEN CONTINUED ON UNTIL IT CAME TO REST APRX 350' FROM THE INITIAL IMPACT POINT. THE LANDING GEAR HAD BEEN RETRACTED AT THE TIME OF INITIAL IMPACT AND THE PLT HAD NO INDICATION OF ANY MALFUNCTION/FAILURE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) AIRCRAFT HANDLING - IMPROPER - PILOT IN COMMAND
2. (F) LIGHT CONDITION - NIGHT
3. (C) PROPER CLIMB RATE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	50, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	November 6, 1986
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2658 hours (Total, all aircraft), 221 hours (Total, this make and model), 2658 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N3451X
Model/Series:	M20C M20C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3409
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	September 25, 1986 Annual	Certified Max Gross Wt.:	2575 lbs
Time Since Last Inspection:	66 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2658 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A1D
Registered Owner:	RICHARD S. ISAAK	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	MBG ,1715 ft msl	Distance from Accident Site:	43 Nautical Miles
Observation Time:	20:00 Local	Direction from Accident Site:	240°
Lowest Cloud Condition:	Clear	Visibility	12 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-2°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:	MOBRIDGE , SD (MBG)	Type of Clearance:	None
Departure Time:	19:55 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	45.759086,-99.619621(est)

Administrative Information

Investigator In Charge (IIC): Collins, Robert

Additional Participating Persons: MARK GOODWIN; , SD
DICK BRANDIGER; , SD

Original Publish Date: March 10, 1988

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=17168>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).